Donald Abelson Chief of the International Bureau Federal Communications Commission 445 12th Street SW Washington, D.C. 20554

Dear Mr. Abelson:

The National Telecommunications and Information Administration, on behalf of the Executive Branch Agencies, has approved the release of an additional Draft Executive Branch (NTIA) proposal considering federal agency inputs toward the development of U.S. Proposals for WRC-03.

This proposal addresses agenda item 1.3 and is forwarded for your consideration and review by your WRC-03 Advisory Committee. Jim Vorhies from my staff will contact Alexander Roytblat and reconcile any differences.

Sincerely,

(Signed July 2, 2002)
Fredrick R. Wentland
Acting Associate Administrator
Office of Spectrum Management

Enclosure

United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 1.3: to consider identification of globally/regionally harmonized bands, to the extent practicable, for the implementation of future advanced solutions to meet the needs of public protection agencies, including those dealing with emergency situations and disaster relief, and to make regulatory provisions, as necessary, taking into account Resolution **645 (WRC 2000)**;

Background Information: WRC-2000 considered the benefits of globally/regionally harmonized frequency bands for future advanced solutions for public protection and disaster relief and an increasing need for interoperability and inter-working between security and emergency networks, both nationally and for cross-border operations, in emergency situations and disaster relief. The guidance regarding ITU-R studies under agenda item 1.3 is provided in Resolution **645 (WRC-2000)**. This resolution includes the study of possible spectrum for future advanced solutions for public protection and disaster relief. It also includes the possible development of a resolution identifying the technical and operational basis for global cross-border circulation of radiocommunication equipment in emergency and disaster relief situations.

Based on the studies conducted by the ITU-R, the United States believes that any spectrum recognized for future advanced solutions for public protection and disaster relief should be developed in an ITU-R Recommendation and linked to the Radio Regulations through a WRC Recommendation. approach provides recognition of spectrum used for public protection and disaster relief, acknowledges the need for national prerogatives, and allows flexible updates without maintaining a WRC agenda item specifically for this issue. The United States believes it is important to preserve the prerogatives of Administrations to implement spectrum for future advance solutions for public protection and disaster relief applications. The attached proposed WRC Recommendation allows for recognition of spectrum for future advanced solutions for public protection and disaster relief without conveying any status or priority under the radio regulations, as well as, provides uniform guidance to Administrations, users and manufacturers. This recognition has several advantages such as facilitating economies of scale in the production of radiocommunication equipment for public protection and disaster relief, consolidation of duplicated infrastructure, improved spectrum efficiency, potential for interoperability nationally, regionally as well as internationally, and improved operational effectiveness. A WRC Recommendation would help to facilitate cross-border public protection operations and effective international response to emergency and disaster relief situations when required and would provide the potential for relief organizations around the world to communicate and interact more quickly and efficiently, thereby speeding disaster relief efforts without constraining their ability to use spectrum in which they currently operate. At the same time, recognition of spectrum for future advanced solutions should not preclude the use of any spectrum in bringing disaster relief.

Proposal:

USA//1 NOC

Article 5

Frequency Allocations

Reasons: The United States does not support identification of spectrum for public protection and disaster relief in the Table of Frequency Allocations (Article 5 of the Radio Regulations).

RECOMMENDATION PUBLIC PROTECTION AND DISASTER RELIEF (PPDR) (WRC-03)

Public protection and disaster relief

The World Radiocommunication Conference (Geneva, 2003),

considering

- a) the growing telecommunication needs of public agencies and organizations dealing with law and order, disaster relief, emergency response and including the protection of life and property;
- b) that future advanced solutions used by such public protection and disaster relief agencies and organizations will require high data rates;
- c) that current public protection and disaster relief applications are mostly narrow-band, including voice and low data-rate applications, typically in channel bandwidths of 25 kHz or less; that in even in times of disasters, when most terrestrial-based networks are destroyed, amateurs,
- d) that in even in times of disasters, when most terrestrial-based networks are destroyed, amateurs, satellite and other non-terrestrial networks can still provide communications services to assist in public protection and disaster relief efforts;
- e) that although there will continue to be narrow-band requirements, many future applications will be wideband (indicative data rates in range of 384-500 kb/s) and broadband (indicative data rates in range of 1-100 Mbit/s) with channel bandwidths dependant on use of spectrally efficient technologies;
- f) that technology exists today to enable dissimilar radios to be interoperable across different spectrum with different waveforms;
- g) that commercial systems can serve as a complement to dedicated systems in support of public protection and disaster relief applications and that such complementary use would be in response to market demands;
- h) that there is potential for new technologies such as IMT-2000 and systems beyond and Intelligent Transportation Systems (ITS) that will support or supplement advanced public protection and disaster relief applications;
- i) that Resolution **98 (PP-98)** urges Member States to facilitate use of telecommunications for the safety and security of humanitarian personnel,

recognizing

- a) the importance of interoperability in the provision of administrations recognizing and making available spectrum for public protection and disaster relief with the benefits of:
 - i) increased potential for interoperability;
- ii) a broader manufacturing base and increased volume of equipment resulting in economies of scale and expanded availability of equipment;

- iii) improved spectrum management and planning;
- iv) enhanced cross-border and international coordination;
- v) improved cross-border circulation of equipment;
- vi) efficient use of radio frequency spectrum
- b) that spectrum planning for public protection and disaster relief is done at the national level, should taken into account the need for interoperability and recognized spectrum of neighboring administrations;
- c) the benefits of cooperation between countries for the provision of effective humanitarian assistance during disasters;
- d) the needs of countries, particularly for developing countries, for low-cost communication equipment for public protection and disaster relief agencies and organizations;
- e) that the trend is to increase the use of Internet Protocol (IP) based technologies;
- f) that advanced technologies such as software defined radios, cross banding, advanced compression waveforms and networking may help lessen the need for harmonizing spectrum to satisfy public protection and disaster relief requirements

noting

- a) applications requiring large coverage areas and providing good signal availability would generally be accommodated in lower spectrum;
- b) that many administrations use spectrum below 1 GHz primarily for narrow-band public protection and disaster relief applications;
- c) applications requiring wider bandwidths would generally be accommodated in progressively higher spectrum;
- d) that in most administrations, public protection and disaster relief applications are provided at multiple administrative levels, starting with national down to local levels, and cooperation between the levels is a national matter to which recognized spectrum and interoperable operations could assist;
- e) the existing investment in systems supporting public protection and disaster relief that many administrations have made:
- f) that flexibility must be afforded to disaster relief agencies and organizations to use current and future radiocommunication in an independent manner, so as to facilitate their humanitarian operations.

recommends

- 1. that administrations encourage public protection and disaster relief agencies and organizations to utilize both existing and new technologies and solutions, to the extent practicable, to satisfy their national public protection and disaster interoperability requirements and to further the national goals of public protection and disaster relief agencies and organizations;
- that administrations encourage agencies and organizations to use advanced wireless solutions, such as IMT-2000 and ITS, for providing complementary support for the communication needs of public protection and disaster relief agencies and organizations,

further recommends

- 1. that administrations continue to use spectrum below 1 GHz for narrow-band PPDR applications;
- 2. that administrations encourage public protection and disaster relief agencies and organizations to utilize relevant ITU-R Recommendations in planning spectrum use and implementing technology and systems supporting public protection and disaster relief;
- 3. that recognition of spectrum for public protection and disaster relief should not preclude the use of any other spectrum to bring aid in times of disaster and humanitarian assistance.

Reasons: A WRC Recommendation, without any specific identification in Article **5** of the Radio Regulations avoids misinterpretation of the regulatory status of systems supporting public protection and disaster relief applications and disassociates any additional recognition of spectrum for public protection and disaster relief from the Table of Frequency Allocations. Different Regional proposals intended to cover spectrum options can be noted in the text of the Recommendation.

USA/ /3 SUP

RESOLUTION 645 (WRC-2000)

Reasons: It is possible to conclude this agenda item at WRC-03 on the basis that the necessary regulatory requirements have been met. Resolution **645** (WRC-2000) should be suppressed.